

Docket Number 4481-022

Serial Number 09/598,890

REMARKS

Applicant notes that a substitute specification with double line spacing and without the all capitalization in a certain portion thereof was submitted on October 23, 2002. Because the substitute specification erroneously included one paragraph having unusual indentations, a retyped version of that paragraph is submitted herewith.

Applicant notes the allowance of claims 33-42, 44-46 and 57 and the indication of claims 56 and 58-62 containing allowable subject matter. Applicant also notes there is no prior art rejection against claims 28, 42, 43, 47-49, 51 or 53-55, as these claims are rejected solely under 35 U.S.C. § 112, second paragraph. The present amendment is believed to avoid the rejection of claims 28, 42, 43, 47-49 and 53-55 under 35 U.S.C. § 112, second paragraph. As such entry of the Amendment is in order because it does not require consideration of new issues, a new search and is directed only to formal, non-substantive matters.

Applicant traverses the rejection of claim 51. The Examiner says it is unclear if the recitation of "a substance of at least once substance-containing supplier disposed within the supply element" is a step in the method or it is intended to be a wherein clause. This particular clause was inserted to provide an antecedent basis for the substance that is defined later in the claim. Insertion of the step of "disposing a substance in at least one substance-container within the supply element" is unnecessary and is inadvisable. It is likely that the substance is disposed in the substance-container prior to the method of claim 51 being performed, although this is not necessarily the case. Further, if the substance is disposed in the substance-container outside the United States, there would be no infringement of claim 51 because all steps of the claim would not be performed in the United States. Based on the foregoing, the rejection of claim 51 based on 35 U.S.C. § 112, second paragraph, is incorrect and should be withdrawn.

Claim 17 has been provisionally rejected as being unpatentable under the judicially created doctrine of double patenting over claim 20 of the co-pending application 09/595,420, that is jointly owned by the owner of the present application, Agilent Technologies, Inc. and Caliper Technologies, Corp. Applicant defers comment on this provisional rejection until claim 20 of the co-pending application has, in fact, been patented. Because of the co-ownership situation, Applicant is not in a position to submit a terminal disclaimer and will consider its options on this issue if, and when, the co-pending application issues as a United States Patent. Applicant,

Docket Number 4481-022

Serial Number 09/598,890

therefore, requests suspension of the prosecution of the present application until the '420 application matures into a patent.

Applicant traverses the rejection of claims 17-25, 30 and 31, as being anticipated by Lebel et al., U.S. Pat. 6,045,755. The Examiner apparently relies on col. 6, lines 11-22, lines 27-29, col. 24, lines 48-65 of Lebel et al. to disclose a sealed reaction vessel 300 having a capacity of approximately 4 ml. A 14 gauge needle can be inserted through the seal to enable fluids to be withdrawn from reaction vessel 300 into an analyzer. However, Lebel et al. has no disclosure of the claim 17 requirement for a substance supplier and seal therefor to have a size, position, material and shape for causing the seal to be opened to a microchip in response to the supply element and the microchip being joined together and for enabling the substance to be transferred to from the substance supplier to a second substance supplier disposed within the microchip. In this regard, Lebel et al. has no disclosure whatsoever of a microchip, no less a microchip with a substance supplier disposed therein.

Apparently, the Examiner relies on inherency to provide the foregoing deficiency in the Lebel et al. reference *vis a vis* the foregoing requirements of claim 1 for the size, position, material and shape of the substance supplier seal. The Examiner is reminded of the requirements for a proper rejection based on inherency. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F3d 1531, 1534, 28 USPQ 1955, 1957 (Federal Circuit 1993); *In Re Oelrich*, 666 F2d 578, 58, 582, 212 USPQ 323, 326 (CCPA 1981). To establish inherency, extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill in the art. Inherency may not be established by probabilities or probabilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Roberston* 169 F3d 743, 745, 49 UDSPQ 2nd 1949, 1950-1951 (Federal Circuit 1999). In relying upon a theory of inherency, the examiner must provide a basis in fact or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art. *Ex parte Levy*, USPQ 2nd 1461, 1464 (Board of Patent Appeals and Interferences 1990). Because the Examiner has provided no rationale or other evidence to support the position that Lebel et al. inherently discloses a substance supplier and a seal therefore having a size, position, material and shape causing the

Docket Number 4481-022Serial Number 09/598,890

seal thereof to be opened to a microchip in response to the supply element and the microchip being joined together and for enabling the substance to be transferred from the substance supplier to a substance supplier disposed within the microchip, the rejection based on Lebel et al. is incorrect.

The citation in the Office Action of *Ex parte Masham*, 2 USDQ2d 1647 (Board of Patent Appeals and Interferences 1987) is inapposite. In the *Masham* case, the preamble of claim 1 recited that the apparatus was for mixing of flowing developer material and the body of the claim recited means for mixing, wherein the mixing means was stationary and completely submerged in the developer material. The claim was rejected over a reference which disclosed all the structural limitations of the claim for the intended use of the mixing flowing developer. The mixer was only partially submerged in the developer material. The Board held that the amount of submersion is immaterial to the structure of the mixer and thus that the claim was properly rejected by the Examiner. In the present case, no similar situation exist because Applicant specifically states that the substance supplier and the seal therefor have a size, position, material and shape for causing the seal to be opened to the microchip. In other words, there is structure defined in claim 17, not merely an intended result. The structure is included in the claim by stating that the substance supplier and the seal therefor have a size, position, material and shape. No similar limitations were found in the *Masham* case.

The Examiner is also reminded of *In re Venezia*, 530 F.2d 956, 189 U.S.P.Q. 149 (CCPA 1976). The claims considered by the Court of Customs and Patent Appeals were directed to a kit with parts "adapted" to be positioned relative to each other. The Court held that such parts defined a structure relationship between the parts. In the present case, the language is much more specific than the "adapted" language the Court found acceptable in *Venezia*. In claim 17, there is a specific recitation that the substance supplier and seal have a size, position, material, and shape for causing the seal to be opened to a microchip.

Based on the foregoing factors, the rejection of claim 17 as being anticipated by Lebel et al. is incorrect.

Because claims 18-25, 30, and 31 depend on claim 17, the dependent claims are allowable with independent claim 17. In addition, many of these dependent claims recite features that Lebel et al. does not disclose and which do not appear to be inherent in Lebel et al.

Docket Number 4481-022Serial Number 09/598,890

For example, claim 19 requires the seal of the substance supplier of the supply element to comprise a wax. Claim 22 requires a mechanically resistant membrane to be a metal or a gas permeable polymer. Claim 25 requires an analyte supplier and a seal therefore to have a size, position, material and shape for causing the seal to be open to a microchip in response to the supply element and the microchip being joined together and for causing an analyte to be transferred from an analyte supplier to an analyte supplier disposed within the microchip. A reagent supplier is required to have a reagent seal for maintaining the reagent therein in the particular supplier. The reagent supplier and seal therefore have a size, position, material and shape for causing the seal thereof to be opened to the microchip in response to the supply element and the microchip being joined together and for causing the reagent to be transferred from the reagent supplier to a reagent supplier disposed within the microchip.

Based on the foregoing, claims 18-25, 30, and 31 are not anticipated by Lebel et al.

Applicant traverses the rejection of claims 17-21, 23-27 and 29-31 as being anticipated by Chow, U.S. Patent No. 6,071,478. The Examiner apparently relies primarily on the portion of Chow which appears in col. 10, lines 47-61 and which is basically repeated in the first full paragraph on page 9, of the Office Action. However this portion of Chow is not concerned with a supply element for a laboratory microchip. Instead, this portion of Chow is concerned with flow biasing connectors that may be probes or pins on a adapter which are positioned to directly engage fluids present on or in a sample substrate. The probes or pins to supply electrical potential to the fluids present on or in the sample substrate. As such, the flow biasing connectors described in col. 10, lines 47-61 of Chow do not include a substance supplier and seal therefor having a size, position, material and shape for causing the seal to be opened to the microchip in response to the supply element and the microchip being joined together and for enabling the substance to be transferred from the substance supplier to a substance supplier disposed within the microchip, as claim 17 requires.

Claims 18-21, 23-27 and 29-31, are allowable over Chow for the same reasons advanced with regard of claim 17, upon which they depend. Since Chow is not concerned with a substance supplier, but the portion of Chow relied upon by the Examiner is concerned with flow biasing connectors, Chow is completely irrelevant to these claims. In this regard, the Examiner is reminded that structural requirements in the preamble of a claim, such as the requirement in the

Docket Number 4481-022Serial Number 09/598,890

foregoing dependent claims for the structure to be directed to a laboratory microchip supply element cannot be ignored.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

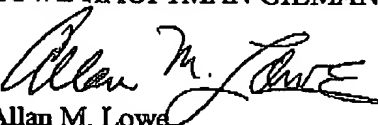
To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Early issuance of a Notice of Allowance is courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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